

What is claimed is:

- 5 1. A dual energy coupling device, comprising:  
a first electric conductor; and  
a second electric conductor,  
wherein said first electric conductor is operable to transfer a  
magnetic energy and an electric energy across an interface to said second  
electric conductor in response to a reception of an alternating electric signal.
- 10 2. The dual energy coupling device of claim 1, wherein said first  
electric conductor has a spiral configuration and said second electric conductor  
has a spiral configuration.
- 15 3. The dual energy coupling device of claim 1, wherein said first  
electric conductor and said second electric conductor are symmetrical relative to  
the interface.
- 20 4. The dual energy coupling device of claim 1, further comprising:  
a first substrate including a corrugated surface having said first  
electric conductor formed thereon; and  
a second substrate includes a corrugated surface having said  
second electric conductor formed thereon.

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5. A dual energy coupling device, comprising:  
a first power source operable to provide a first electric signal;  
a first electric conductor in electrical communication with said first  
5 power source to thereby receive the first electric signal when said first power  
source is providing the first electric signal; and  
a second electric conductor,  
wherein said first electric conductor is operable to transfer a first  
magnetic energy and a first electric energy across an interface to said second  
10 electric conductor in response to a reception of the first electric signal.

6. The dual energy coupling device of claim 5, further comprising:  
a first load in electrical communication with said second electric  
conductor,  
15 wherein a current drive signal flows through said second electric  
conductor and said first load in response to a reception of said first magnetic  
energy by said second electric conductor.

7. The dual energy coupling device of claim 5, further comprising:  
20 a second power source operable to provide a second electric  
signal;  
a third electric conductor in electrical communication with said  
second power source to thereby receive the second electric signal when said  
second power source is providing the second electric signal; and  
25 a fourth electric conductor,  
wherein said third electric conductor is operable to provide a  
second magnetic energy and a second electric energy across the interface to  
said fourth electric conductor in response to a reception of the second electric  
signal.

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8. The dual energy coupling device of claim 7, further comprising:  
a second load in electrical communication with said fourth electric  
conductor,

5 wherein a current drive signal flows through said fourth electric  
conductor and said second load in response to a reception of said second  
magnetic energy by said fourth electric conductor.

10 9. The dual energy coupling device of claim 5, further comprising:  
a power source operable to provide a current control signal; and  
a third load operable to be in electrical communication with said  
power source in response to a reception of said first electric energy by said  
second electric conductor and a reception of said second electric energy by said  
fourth electric conductor to thereby receive the current control signal when said  
15 power source is providing the current control signal.

20 10. The dual energy coupling device of claim 5, wherein said first  
electric conductor has a spiral configuration and said second electric conductor  
has a spiral configuration.

25 11. The dual energy coupling device of claim 5, wherein said first  
electric conductor and said second electric conductor are symmetrical relative to  
the interface.

30 12. The dual energy coupling device of claim 5, further comprising:  
a first substrate including a corrugated surface having said first  
electric conductor formed thereon; and  
a second substrate includes a corrugated surface having said  
second electric conductor formed thereon.

13. A dual energy coupling device, comprising:  
a first electric conductor having a spiral configuration; and  
a second electric conductor having a spiral configuration,  
wherein said first electric conductor and said second electric  
conductor are symmetrical relative to an interface.

14. A dual energy coupling device, comprising:  
a first power source operable to provide a first electric signal;  
a first load;  
a means for inductively coupling said first power source and said  
first load when said first power source is providing the first electric signal.

15. The dual energy coupling device of 14, further comprising:  
a second power source operable to provide a second electric  
signal;  
a second load; and  
a means for inductively coupling said second power source and  
said second load when said second power source is providing the second  
electric signal.

16. The dual energy coupling device of 15, further comprising:  
a power source;  
a third load; and  
a means for capacitively coupling said power source and said third  
load when said first power source and said first load are inductively coupled and  
when said second power source and said second load are inductively coupled.

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17. A dual energy coupling device, comprising:
- a first power source operable to provide a first electric signal;
  - a second power source operable to provide a second electric
- 5 signal;
- a power source;
  - a load; and
  - a means for capacitively coupling said power source and said third
- load when said first power source is providing the first electric signal and said
- 10 second power source is providing the second electric signal.

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